CRESCENT

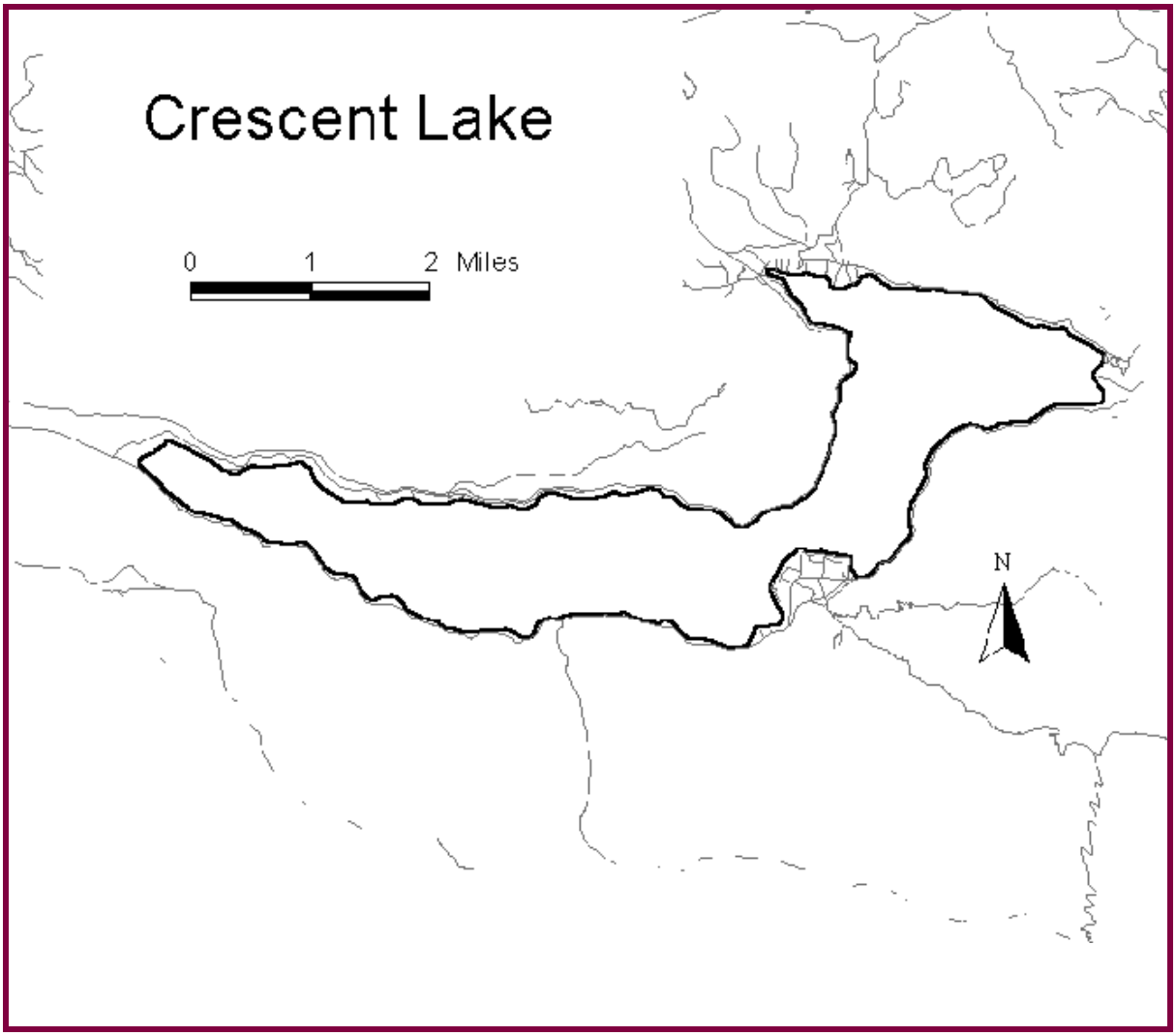
CLALLAM County

Lake ID: CRECL1

Ecoregion: 1

Crescent Lake is 14 miles west of Port Angeles. It is 8.5 miles long. Several inlets flow into the lake, including Barnes, Smith, Aurora, Lapoel, Cross, and Eagle Creeks. Crescent Lake drains via the Lyre River to the Strait of Juan de Fuca. There is a precipitous shoreline, except at both ends. It is the third largest natural lake in Western Washington. Beardslee trout are found only in Crescent Lake.

Area (acres)	*Maximum Depth (ft)*	*Mean Depth (ft)*	*Drainage (sq mi)*	
5127	624			
Volume (ac-ft)	***Shoreline (miles)***	***Altitude (ft abv msl)***	***Latitude***	***Longitude***
		580	48 05 41.	123 48 14.



Station Information

CRECL1

Primary Station	Station # 1	latitude: 48 04 58.4	longitude: 123 46 62.4
	Description:	In east end of lake approximately midway between eastern shore and outlet (Lyre River)	
Secondary Station	Station # 2	latitude: 48 03 33.3	longitude: 123 49 51.5
	Description:	Approximately in middle of lake midway between Lake Crescent Lodge to the east and a picnic area to the west	

Trophic State Assessment for 1998

CRESCENT

Analyst: KIRK SMITH

TSI_Secchi:		
TSI_Phos:	20	J
TSI_Chl:	24	J
Narrative TSI:[a]	O	

Crescent Lake is an ultra-oligotrophic lake nestled in the Olympic Mountain range within the boundary of the Olympic National Park. Our Secchi line was not long enough to measure the true Secchi depth, nor were we able to accurately measure total phosphorus or chlorophyll a because our detection limits were not adequate for such low concentrations. Because Crescent is clearly pristine, we recommend a total phosphorus criterion be set at the Cascades ecoregion/ultra-oligotrophic action value of 4 ug/L pending additional studies with lower detection levels. However, Crescent Lake may be nitrogen limited, and all anthropogenic nutrient sources should be limited and controlled in this national resource.

[a] E=eutrophic, ME=mesoeutrophic, M=mesotrophic, OM=oligomesotrophic, O=oligotrophic

Chemistry Data

CRESCENT

Date	Time	Strata	Tot P (ug/L)	Tot N (mg/L)	TN:TP	Chloro-phyll (ug/L)	Fecal Col. Bacteria (#/100mL)	Hardness (mg/L)	Calcium (ug/L)	Turbidity (NTU)
Station 1										
6/8/1998		E	3 U	.01 U	3	.5 U		53.3	16800	.7
7/30/1998		E	3 U	.01 U	3	.5 U				
9/15/1998		E	3 U	.022	7	.5 U				.5 U
Station 2										
6/8/1998		E	8.2	.01 U	1	.5 U				
7/30/1998		E	3 U	.018	6					
8/13/1998		E	3 U	.041	14	.5 U				.5 U
9/15/1998		E	3 U	.01 U	3	.52 J				

Strata: L=lake surface, E=epilimnion, H=hypolimnion; Qualifier: J=Estimate, U=Less than

Watershed Survey

CRESCENT

Survey Date: 9/15/1998

Land Uses (1 = Primary, 2 = Secondary, etc.)

	Agriculture(commercial, not hobby)		**Residential**
	Commercial, Industrial	2	**Park, forest or natural**
1	**Major transportation**		

Impervious surfaces (Roads and parking area): No Curbs

Observations (check mark denotes presence)

BMP's ☐

Lake shore is kept at or near natural conditions. The vast majority of the watershed is a nattional park.

Odors ☐

Cattle ☐ **Ducks** ☐ **Geese** ☐

Fertilizers and weed killers appear to be used in residential or agriculture area ☐

Buffer zones around streams and wetlands ☑

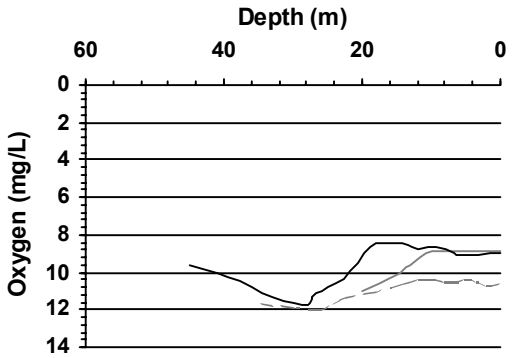
Buffer zones in place around most of the lake--very little development.

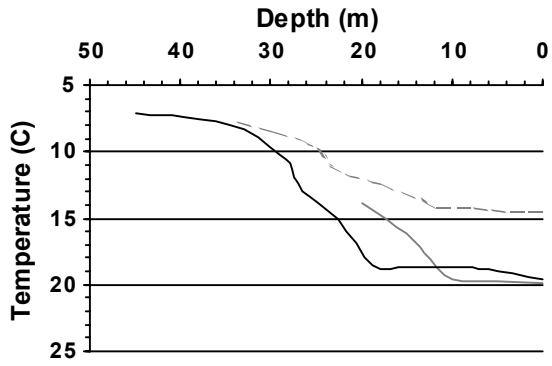
Irrigation ☐

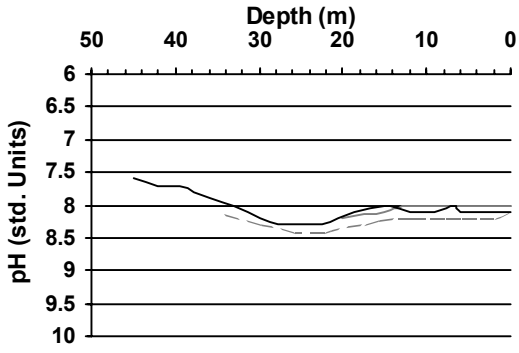
Survey Id: 90

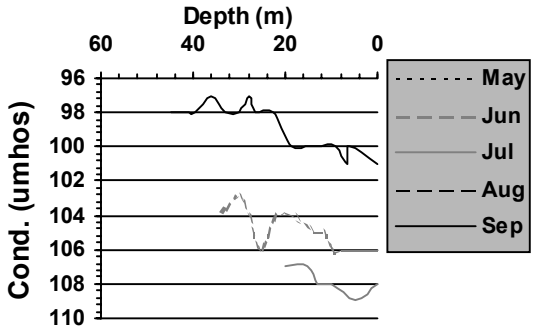
Secchi Depth and Profile Graphics

Station: 1 CRECL1









Secchi Data and Field Observations

CRESCENT

Date	Time	Temp-erature (F)	Secchi (ft)	Color (1-greens, 11-browns	Bright-ness (pct)	Wind (1-none, 5-gusty)	Rainfall (0-none, 5-heavy)	Aesthetics (1-bad, 5-good)	Swimming (1-poor, 5-good)	Geese (#)	Waterfowl (besides geese #)	Boats-Fishing (#)	Boats-Skiing (#)
Station 1													
6/8/1998				1	50	4		5	5	0	0	0	0
	Sampler: SMITH			Remarks: WATER WAS A TORQUOISE BLUE. WATER WAS TOO CLEAR AND DEEP FOR A SECCHI READING									
7/31/1998				1	80	1		5	5	7	1	1	1
	Sampler: SMITH			Remarks: WATER WAS EXTREMELY CLEAR, TOO CLEAR FOR A SECCHI READING. DO TAKEN AT 5 METERS									
8/13/1998				1	0			5	5	0	0	1	3
	Sampler: SMITH			Remarks: WATER WAS TOO CLEAR AND TOO DEEP FOR A SECCHI READING.									
9/15/1998				1	50			5	5	4	5	2	0
	Sampler: SMITH			Remarks: WATER WAS TOO CLEAR AND TOO DEEP FOR A SECCHI READING. The Conductivity and oxygen results are qualified as an estimate due to postcalibration failing QA/QC requirements.									